



## **CASE STUDY** (048-P-En)

### **Power Plant - Mobile Reverse Osmosis Plant for the production of 1.200 m<sup>3</sup>/day, Greece**

#### **DATE OF IMPLEMENTATION**

December 2009

- **Production of 1200 m<sup>3</sup>/day of water for high pressure boilers in power plants**
- **Supply of brackish water from wells or softened water for cooling towers**

#### **TECHNICAL CHARACTERISTICS**

- Feed water tank
- Dosing systems for prechlorination, sulphuric acid, coagulant
- Two feed water pumps (one stand by)
- Ultra Filtration (UF)
- UF product water tank
- Antiscalant dosing
- NaHSO<sub>3</sub> Dosing
- 1<sup>st</sup> pass Reverse Osmosis System TBW354
- Cleaning In Place System for 1<sup>st</sup> pass Reverse Osmosis System
- 1<sup>st</sup> pass Product Water Tank
- 2<sup>nd</sup> pass Reverse Osmosis System TBW342
- Degassing with membranes
- Electro-deionization system
- CIP for UF, membranes, electrodeionization
- Product Water Tank
- Product water pumps that transfer product water to the central tank of the station
- The system is installed in two 40ft high cube containers, placed on two truck trailers

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### Power Plant - Mobile Reverse Osmosis Plant for the production of 1.200 m<sup>3</sup>/day, Greece

#### GENERAL CHARACTERISTICS

Water used for steam generation in power plants (combined cycle plant etc.) requires strict quality standards for purified or deionized water.

TEMAK has carried out numerous water treatment projects producing purified and deionized water in the industry sector as well as in power plants in Greece and abroad. Moreover, TEMAK has significant experience in contemporary technologies used as treatment stages in the production of deionized water, such as ultra-filtration of pre treatment water through ultra-filtration membranes, CEDI (polishing stage) or degassing membranes (stage of removing CO<sub>2</sub> from water before it enters CEDI).



Since 1980, TEMAK has been at the side of local communities covering their needs with reliability and consistency, having a full range of certified water treatment products.

Thanks to the systems manufacture in Greece and the high expertise of its specialized staff, TEMAK is able to offer total water treatment solutions, from study and design to manufacture and installation of required systems.

The 750.000 m<sup>3</sup>/day of clean potable water or water for general uses, produced daily from TEMAK's installed systems in Greece and 26 abroad countries, constitute the proof of our experience and know-how in water treatment.